SEQUENCE LISTING

SEQ ID NO:1

human IRAK-4 amino acid sequence

MNKPITPSTYVRCLNVGLIRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHIRRF
EALLQTGKSPTSELLFDWGTTNCTAGDLVDLLIQNEFFAPASLLLPDAVPKTANT
LPSKEAITVQQKQMPFCDKDRTLMTPVQNLEQSYMPPDSSSPENKSLEVSDTRFH
SFSFYELKNVTNNFDERPISVGGNKMGEGGFGVVYKGYVNNTTVAVKKLAAMV
DITTEELKQQFDQEIKVMAKCQHENLVELLGFSSDGDDLCLVYVYMPNGSLLDR
LSCLDGTPPLSWHMRCKIAQGAANGINFLHENHHIHRDIKSANILLDEAFTAKISD
FGLARASEKFAQTVMTSRIVGTTAYMAPEALRGEITPKSDIYSFGVVLLEIITGLPA
VDEHREPQLLLDIKEEIEDEEKTIEDYIDKKMNDADSTSVEAMYSVASQCLHEKK
NKRPDIKKVQQLLQEMTAS

SEQ ID NO:2

human IRAK-4 cDNA sequence

ATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACT
AATTAGGAAGCTGTCAGATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTA
GCTGTAGCTATTAAAAAACCATCTGGTGATGATAGATACAATCAGTTTCACAT
AAGGAGATTTGAAGCATTACTTCAAACTGGAAAAAGTCCCACTTCTGAATTA
CTGTTTGACTGGGGCACCACAAATTGCACAGCTGGTGATCTTGTGGATCTTTT
GATCCAAAATGAATTTTTTGCTCCTGCGAGTCTTTTGCTCCCAGATGCTGTTCC
CAAAACTGCTAATACACTACCTTCTAAAGAAGCTATAACAGTTCAGCAAAAA
CAGATGCCTTTCTGTGACAAAGACAGGACATTGATGACACCTGTGCAGAATC
TTGAACAAAGCTATATGCCACCTGACTCCTCAAGTCCAGAAAATAAAAGTTT
AGAAGTTAGTGATACACGTTTTCACAGTTTTTCATTTTATGAATTGAAGAATG
TCACAAATAACTTTGATGAACGACCCATTTCTGTTGGTGGTAATAAAATGGGA
GAGGGAGGATTTGGAGTTGTATATAAAGGCTACGTAAATAACACAACTGTGG
CAGTGAAGAAGCTTGCAGCAATGGTTGACATTACTACTGAAGAACTGAAACA
GCAGTTTGATCAAGAAATAAAAGTAATGGCAAAGTGTCAACATGAAAACTTA
GTAGAACTACTTGGTTTCTCAAGTGATGGAGATGACCTCTGCTTAGTATATGT
TTACATGCCTAATGGTTCATTGCTAGACAGACTCTCTTGCTTGGATGGTACTC

CACCACTTTCTTGGCACATGAGATGCAAGATTGCTCAGGGTGCAGCTAATGGC
ATCAATTTTCTACATGAAAATCATCATATTCATAGAGATATTAAAAGTGCAAA
TATCTTACTGGATGAAGCTTTTACTGCTAAAATATCTGACTTTGGCCTTGCAC
GGGCTTCTGAGAAGTTTGCCCAGACAGTCATGACTAGCAGAATTGTGGGAAC
AACAGCTTATATGGCACCAGAAGCTTTGCGTGGAGAAATAACACCCAAATCT
GATATTTACAGCTTTGGTGTGGTTTTACTAGAAATAATAACTGGACTTCCAGC
TGTGGATGAACACCGTGAACCTCAGTTATTGCTAGATATTAAAGAAGAAATT
GAAGATGAAGAAAAGACAATTGAAGATTATATTGATAAAAAGATGAATGAT
GCTGATTCCACTTCAGTTGAAGCTATGTACTCTGTTGCTAGTCAATGTCTGCAT
GAAAAGAAAAATAAGAGACCAGACATTAAGAAGGTTCAACAGCTGCTGCAA
GAGATGACAGCTTCTTAA

SEQ ID NO:3

murine IRAK-4 amino acid sequence

MNKPLTPSTYIRNLNVGILRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHIRRF
EALLQTGKSPTCELLFDWGTTNCTVGDLVDLLVQIELFAPATLLLPDAVPQTVKS
LPPREAATVAQTHGPCQEKDRTSVMPMPKLEHSCEPPDSSSPDNRSVESSDTRFH
SFSFHELKSITNNFDEQPASAGGNRMGEGGFGVVYKGCVNNTIVAVKKLGAMVE
ISTEELKQQFDQEIKVMATCQHENLVELLGFSSDSDNLCLVYAYMPNGSLLDRLS
CLDGTPPLSWHTRCKVAQGTANGIRFLHENHHIHRDIKSANILLDKDFTAKISDFG
LARASARLAQTVMTSRIVGTTAYMAPEALRGEITPKSDIYSFGVVLLELITGLAAV
DENREPQLLLDIKEEIEDEEKTIEDYTDEKMSDADPASVEAMYSAASQCLHEKKN
RRPDIAKVQQLLQEMSA

SEQ ID NO:4

mouse IRAK-4 cDNA sequence

GCGGCCGCGTCGACATGCCCCGGTGACCCGCAGCATCCCGATCGCAGGCAGT
CTGAAGTCGCCTGGTGGTCCTGCGTCCTCCACCCCCGAGTCCTCGCCGGACGT
GGCGGGACGCCGATCGCCTTGTCCAGGAAGCGAGGGACGTCCGAGAGGAAG
TAGAAGATGAACAAGCCGTTGACACCATCGACATACATACGCAACCTTAATG
TGGGGATCCTTAGGAAGCTGTCGGATTTTATTGATCCTCAAGAAGGGTGGAA

GAAATTAGCAGTAGCTATCAAAAAGCCGTCCGGCGACGACAGATACAATCAG
TTCCATATAAGGAGATTCGAAGCCTTACTTCAGACCGGGAAGAGCCCCACCT
GTGAACTGCTGTTTGACTGGGGCACCACGAACTGCACAGTTGGCGACCTTGTG
GATCTACTGGTCCAGATTGAGCTGTTTGCCCCCGCCACTCTCCTGCTGCCGGA
TGCCGTTCCCCAAACCGTCAAAAGCCTGCCTCCTAGAGAAGCGGCAACAGTG
GCACAAACACACGGGCCTTGTCAGGAAAAGGACAGGACATCCGTAATGCCTA
TGCCGAAGCTAGAACACAGCTGCGAGCCACCGGACTCCTCAAGCCCAGACAA
CAGAAGTGTAGAGTCCAGCGACACTCGGTTCCACAGCTTCTCGTTCCATGAAC
TGAAGAGCATCACAAACAACTTCGACGAGCAACCCGCGTCTGCCGGTGGCAA
CCGGATGGGAGAGGGGGGATTTGGAGTGGTGTACAAGGGCTGTGTGAACAAC
ACCATCGTGGCGGTGAAGAAGCTCGGAGCGATGGTTGAAATCAGTACTGAAG
AACTAAAGCAACAGTTTGATCAAGAAATTAAAGTAATGGCAACGTGTCAGCA
CGAGAACCTGGTGGAGCTGCTCGGCTTCTCCAGCGACAGCGACAACCTGTGC
TTAGTGTATGCTTACATGCCCAACGGGTCCTTGCTGGACAGACTGTCCTGCCT
GGATGGTACACCACCGCTTTCCTGGCACACAAGGTGCAAGGTTGCTCAGGGG
ACAGCAAATGGCATCAGGTTTCTGCATGAAAATCATCACATTCATAGAGATA
TTAAAAGTGCAAATATCTTACTAGACAAAGACTTTACTGCCAAAATATCTGAC
TTTGGGCTTGCACGGGCTTCGGCAAGGCTAGCGCAGACGGTCATGACCAGCC
GAATCGTGGGCACAACGGCTTACATGGCACCCGAAGCTTTGCGGGGAGAAAT
AACACCCAAATCTGACATCTACAGCTTCGGCGTGGTTCTGTTGGAGCTGATAA
CCGGGCTGGCGGCTGTGGATGAAAACCGTGAACCTCAACTACTGCTGGATAT
TAAAGAAGAGATTGAAGATGAAGAGAAGACGATTGAAGATTACACGGATGA
GAAGATGAGCGATGCGGACCCTGCTTCGGTGGAAGCAATGTACTCTGCTGCT
AGCCAGTGTCTGCATGAGAAGAAAAACAGACGGCCAGACATTGCAAAGGTTC
AACAGCTGCTACAAGAGATGTCTGCTTAA

SEQ ID NO:5

Sense primer for amplification of human IRAK-4

ATGAACAAACCCATAACACCATCAACATATGTGC

SEQ ID NO:6

Antisense primer for amplification of human IRAK-4

TTAAGAAGCTGTCATCTCTTGCAGC